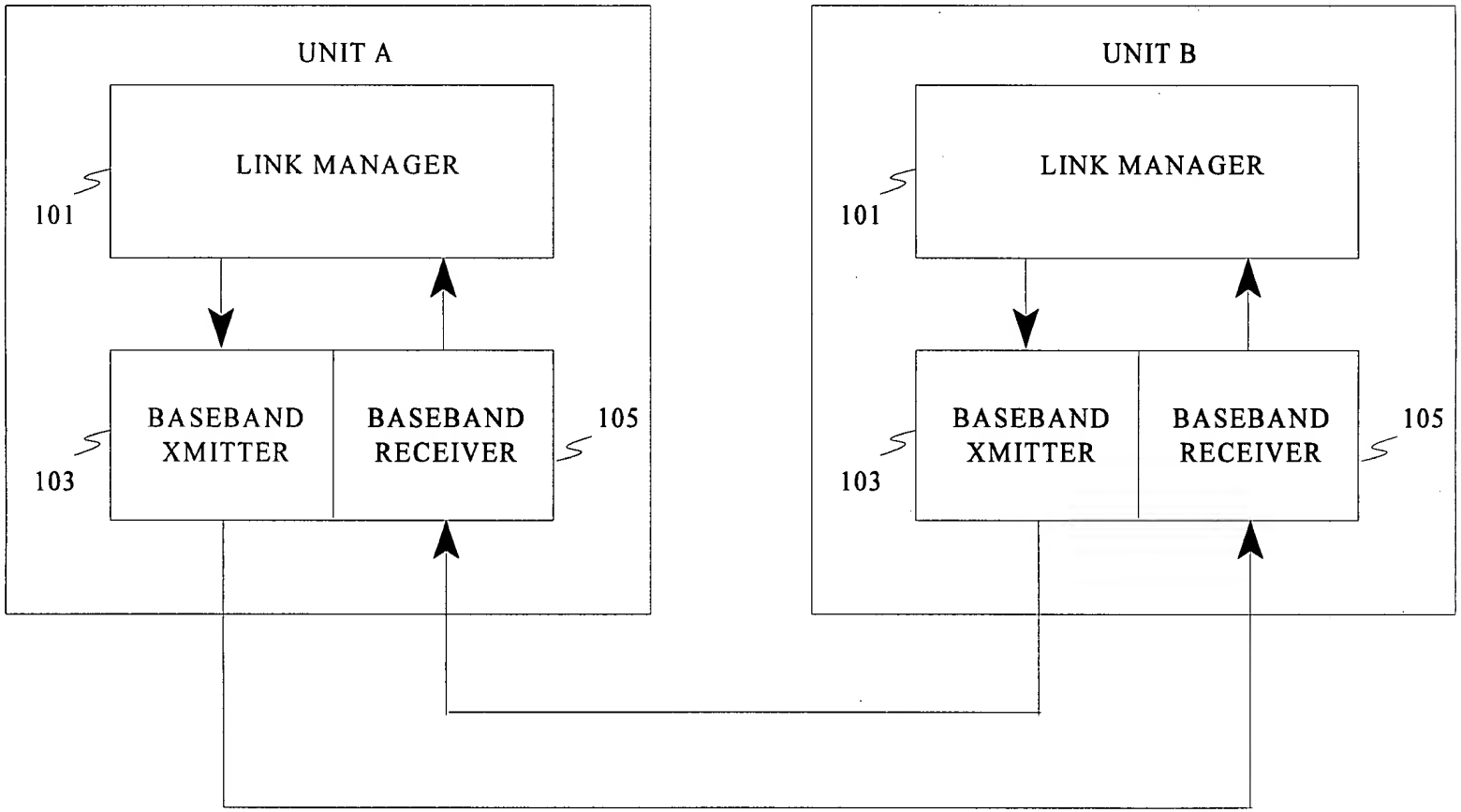

FIG. 1

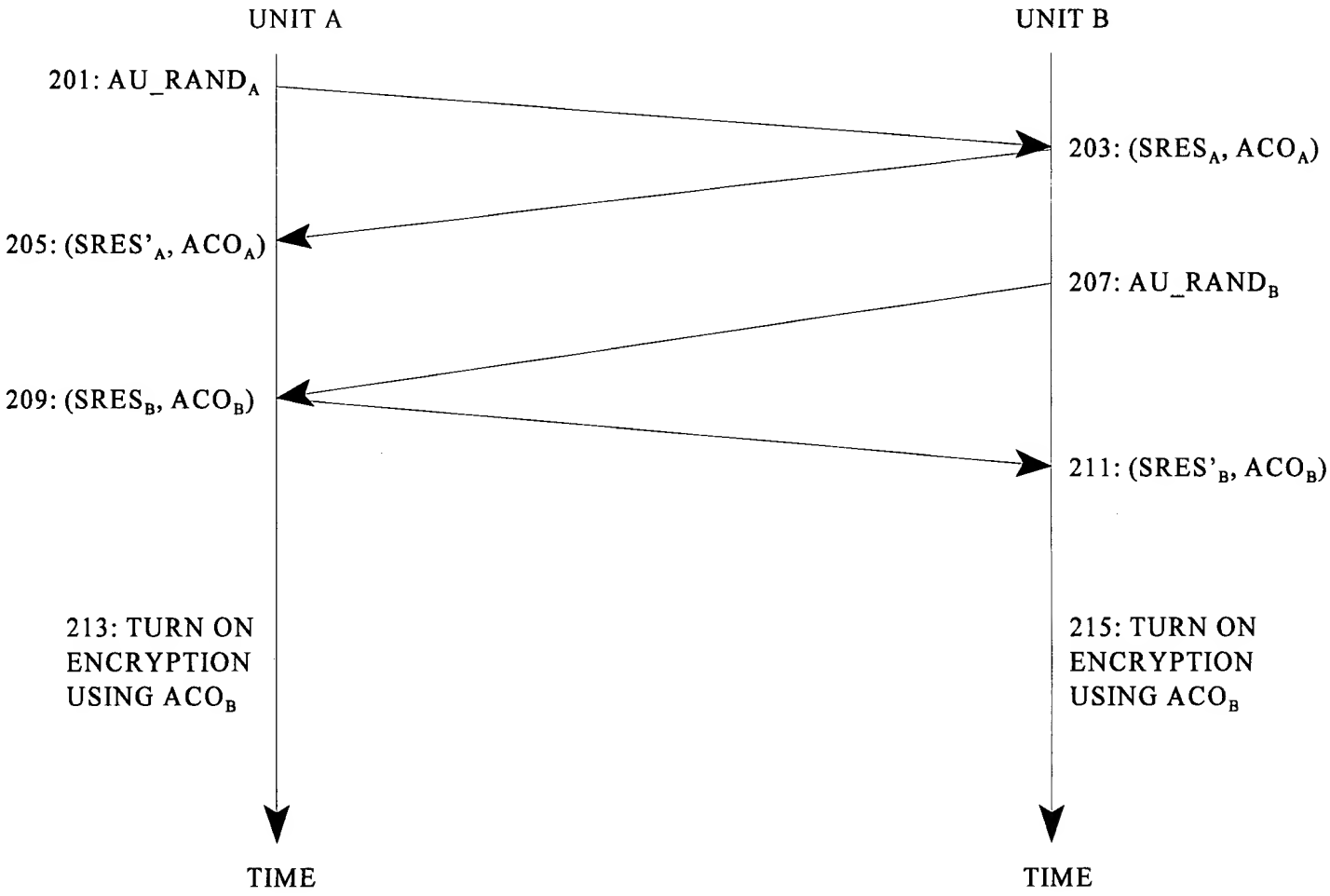

FIG. 2

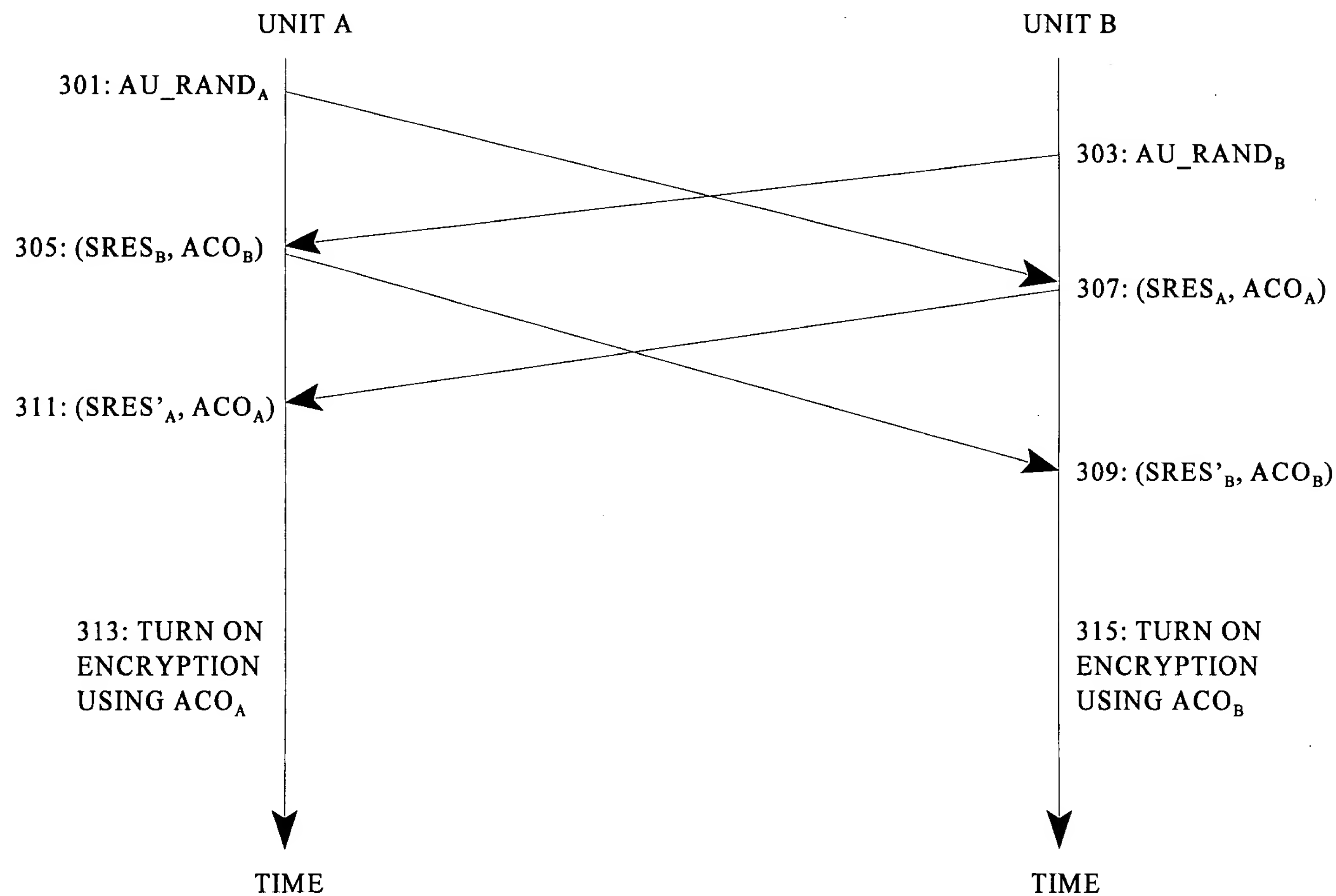

FIG. 3

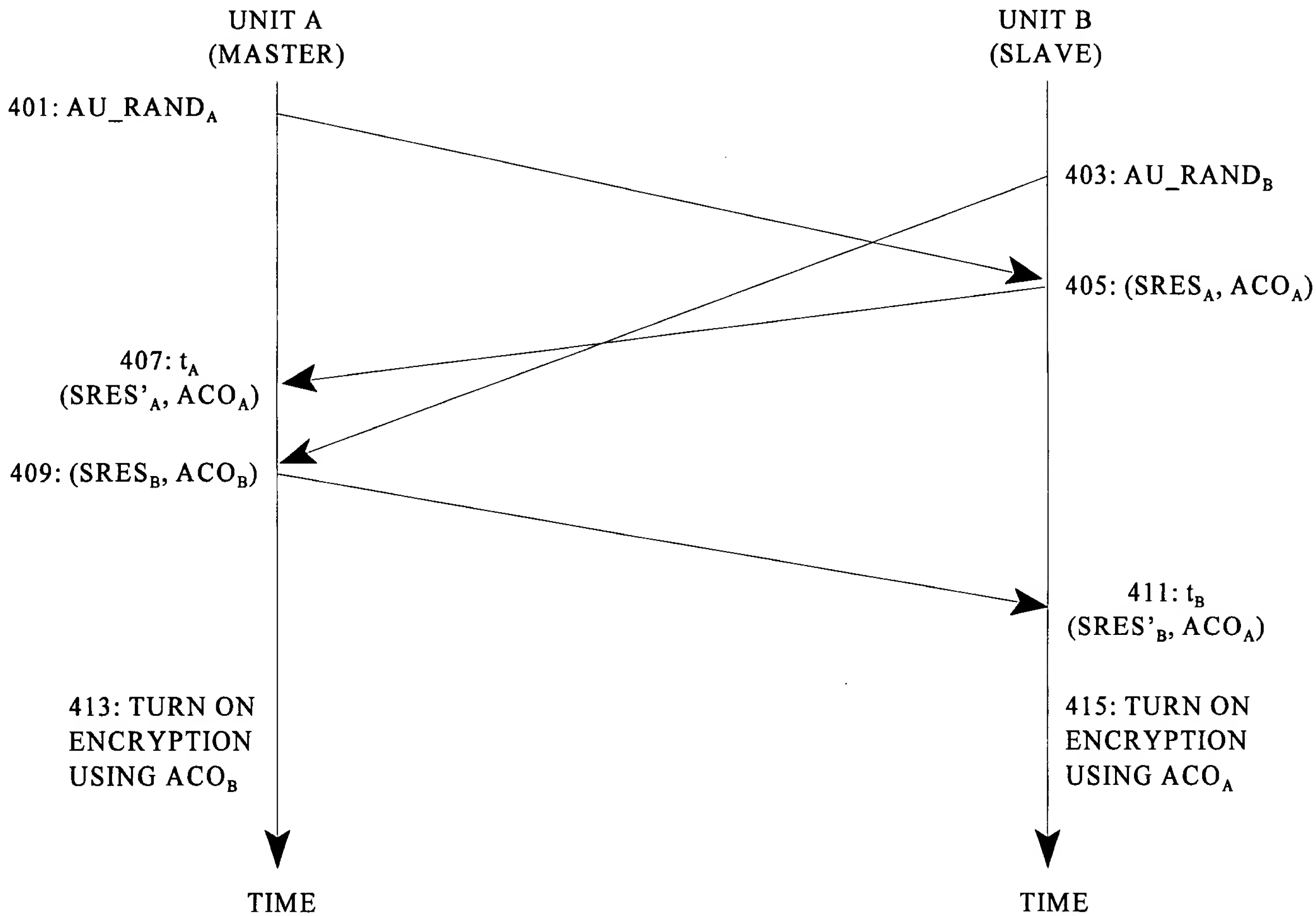

FIG. 4

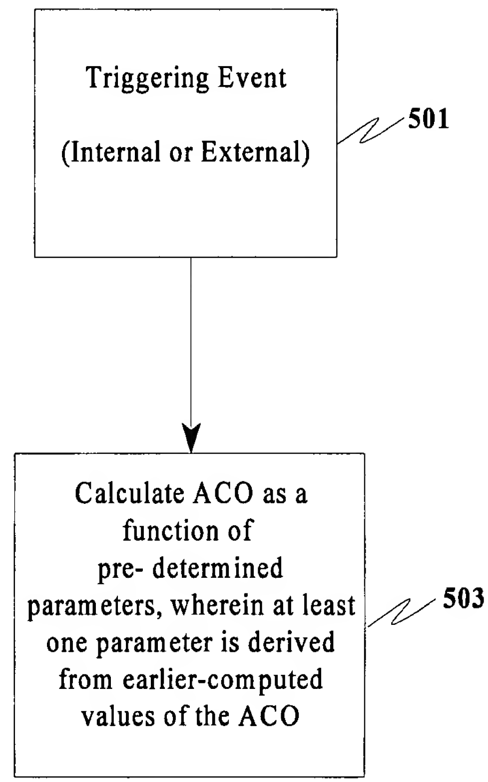
Triggering Event
(Internal or External)
501
Calculate ACO as a function of pre- determined parameters, wherein at least one parameter is derived from earlier-computed values of the ACO
503

FIG. 5

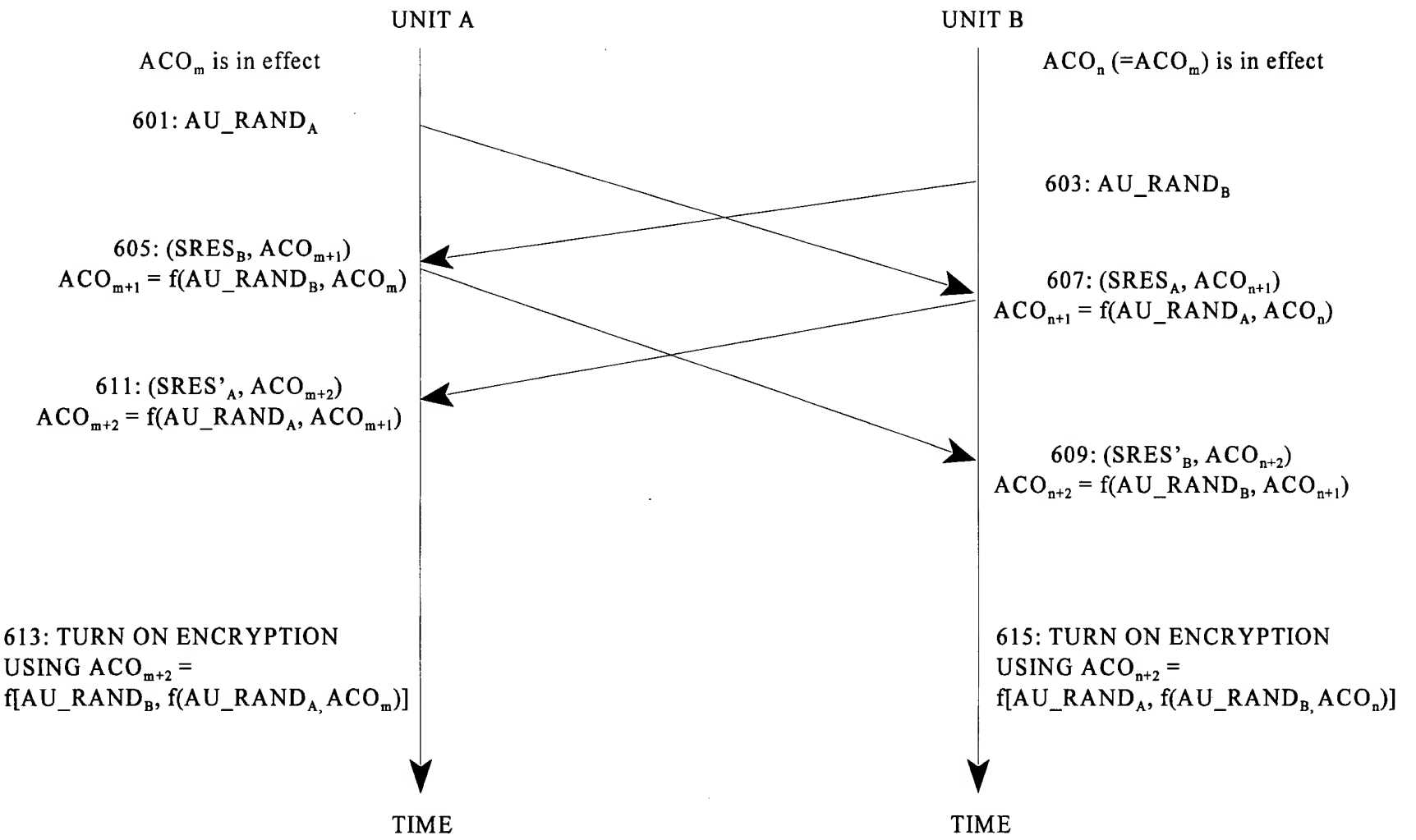
UNIT A
UNIT B
ACO_m is in effect
ACO_n (=ACO_m) is in effect
601: AU_RAND_A
603: AU_RAND_B
605: (SRES_B, ACO_m+1)
ACO_m+1 = f(AU_RAND_B, ACO_m)
607: (SRES_A, ACO_n+1)
ACO_n+1 = f(AU_RAND_A, ACO_n)
611: (SRES'_A, ACO_m+2)
ACO_m+2 = f(AU_RAND_A, ACO_m+1)
609: (SRES'_B, ACO_n+2)
ACO_n+2 = f(AU_RAND_B, ACO_n+1)
613: TURN ON ENCRYPTION USING ACO_m+2 = f[AU_RAND_B, f(AU_RAND_A, ACO_m)]
615: TURN ON ENCRYPTION USING ACO_n+2 = f[AU_RAND_A, f(AU_RAND_B, ACO_n)]
TIME
TIME

FIG. 6

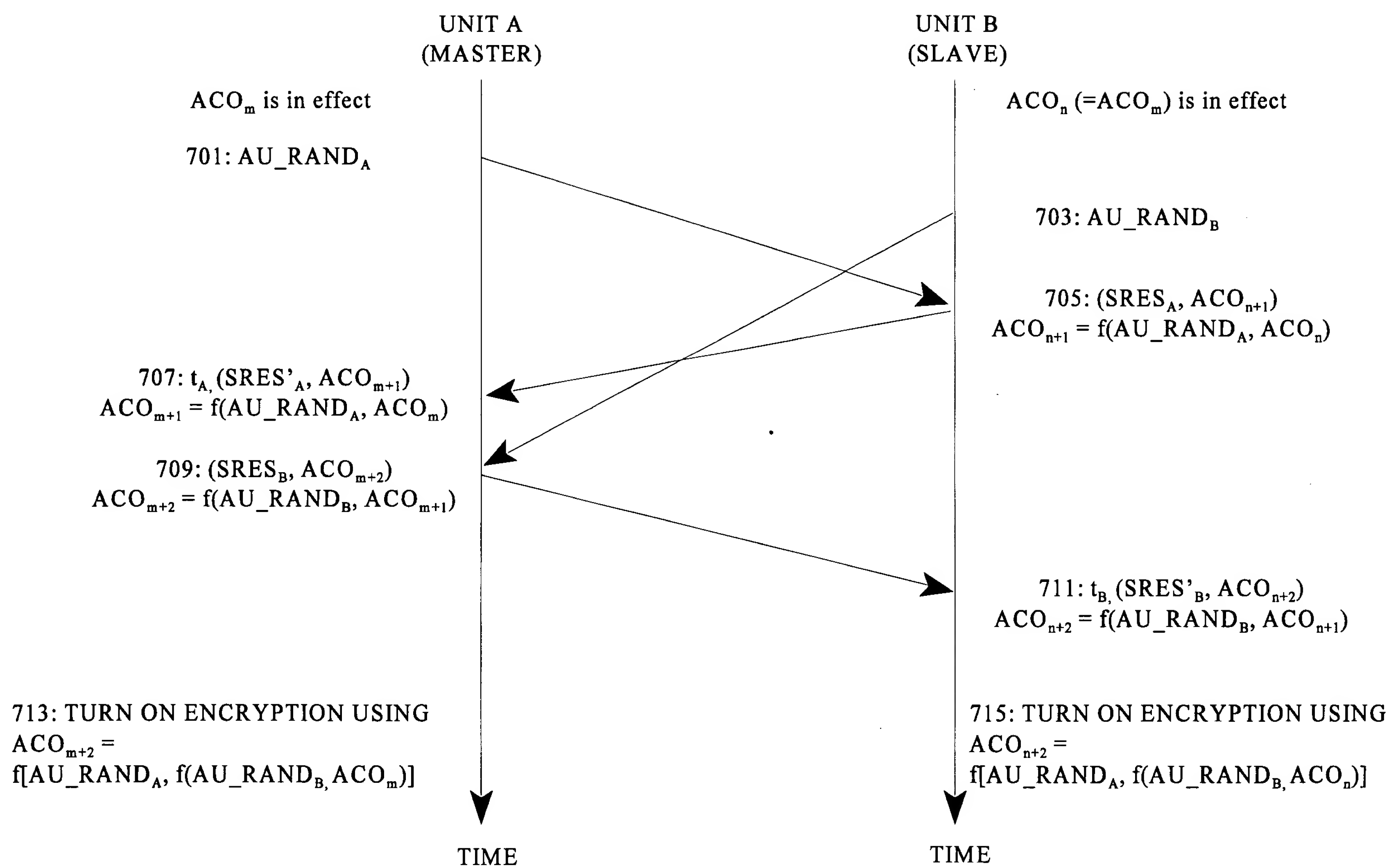
UNIT A
(MASTER)
UNIT B
(SLAVE)
ACO_m is in effect
ACO_n (=ACO_m) is in effect
701: AU_RAND_A
703: AU_RAND_B
705: ($SRES_A$, ACO_{n+1})
$ACO_{n+1} = f(AU\_RAND_A, ACO_n)$
707: t_A, ($SRES'_A$, ACO_{m+1})
$ACO_{m+1} = f(AU\_RAND_A, ACO_m)$
709: ($SRES_B$, ACO_{m+2})
$ACO_{m+2} = f(AU\_RAND_B, ACO_{m+1})$
711: t_B, ($SRES'_B$, ACO_{n+2})
$ACO_{n+2} = f(AU\_RAND_B, ACO_{n+1})$
713: TURN ON ENCRYPTION USING
ACO_{m+2} =
$f[AU\_RAND_A, f(AU\_RAND_B, ACO_m)]$
715: TURN ON ENCRYPTION USING
ACO_{n+2} =
$f[AU\_RAND_A, f(AU\_RAND_B, ACO_n)]$
TIME
TIME

FIG. 7